



State of New Jersey  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF HAZARDOUS WASTE MANAGEMENT

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609-633-1408

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Edward A. Hogan, Esq.  
Porzio, Bromberg & Newman  
163 Madison Avenue  
Morristown, NJ 07960

DEC 20 1987

DEC 23 1987

Dear Mr. Hogan:

Re: Hexcel Corporation - Industrial Chemicals Group  
Lodi Borough, Bergen County  
ECRA Case #86009  
Sampling Plan Dated: April 16, 1986 and Revisions January 13, 1987

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (NJDEP) by the Environmental Cleanup Responsibility Act (ECRA, N.J.S.A. 13:1K-6 et seq.) and delegated to the Chief of the Bureau of Environmental Evaluation and Cleanup Responsibility Assessment pursuant to N.J.S.A. 13:1B-4, the referenced Sampling Plan is hereby approved as conditioned herein:

1. Hexcel Corporation shall accomplish this investigation and any further analytical investigations by the methods outlined in this Sampling Plan. If any change in methods outlined in this sampling plan is necessary or if any delays are encountered, Hexcel Corporation shall inform BEECRA in writing prior to implementation.
2. Hexcel Corporation shall submit summarized analytical results in tabular form. Hexcel Corporation shall also submit with the analytical data all documents associated with the sampling and testing, including but not limited to lab sheets, chain of custody, results of blank analyses, lab chronicles, summary of analytical instrument tuning, and analytical methods used.
3. Hexcel Corporation shall submit the results in triplicate within ninety (90) days of receipt of this approval.
4. Hexcel Corporation shall notify NJDEP at least five (5) business days prior to implementation of sampling.
5. If contamination is determined to exist above a level found acceptable by NJDEP, Hexcel Corporation shall prepare and submit a Cleanup Plan developed pursuant to N.J.A.C. 7:1-3.12 to address said contamination. If the data from implementation of the approved Sampling Plan indicates



the presence of contamination, but is not sufficient to define the full horizontal and vertical extent, then such areal definition shall be proposed as a Sampling Plan Addendum in a form which meets the criteria of N.J.A.C. 7:1-3.7(d)14. The horizontal and vertical extent of contamination shall be determined before an approvable Cleanup Plan can be developed.

6. An accurate, scaled plot plan shall be required for Area of Environmental Concern #1 (AEC #1) and AEC #15. The exact location of the utility tunnel at AEC #1 shall also be included.
7. In addition to the sixteen monitoring wells proposed, four shallow monitoring wells intended to delineate PCB oil - contaminated ground water near the leaking underground oil storage tanks (AEC #1 and the Boiler room) shall be required. If product is encountered during installation of these four wells, additional wells should be installed to delineate the product.
8. The following information on the recovery well at (AEC #1) shall be provided: total depth, length of screen, screen setting, amount of oil recovered and with method of disposal.
9. All borings for soil samples and/or for monitor well installation planned to penetrate the clay layer shall be cased off into the clay before drilling or driving a split spoon sampler through it. Since first water is at 4 or 5 feet, it is crucial to seal off this zone.
10. All borings into the water table require permits. In addition, all borings should be sealed by tremie-grouting with cement-bentonite grout.
11. Hexcel Corporation shall submit with all soil sample results, a summary table for all borings, total depth, sample depth, analyses performed, concentration detected and visual observations including odors.
12. All monitoring wells shall be field-confirmed by a NJGS geologist prior to drilling. It shall also be required to notify NJGS two (2) weeks prior to the drilling date.
13. Recommendations regarding the installation of the monitoring wells are as follows:
  - Those monitoring wells installed as deep wells shall be drilled first and continuously split spoon sampled.
  - Those areas where the clay layer is not present as defined by split spoon recovery, well clusters are not necessary. In this situation, Hexcel Corporation shall install single wells with 15 feet of screen. The screen shall be set from approximately 5 feet above water table to 10 feet below, field conditions permitting.

- If the clay is substantially thick and areally extensive, additional downgradient wells may have to be screened in or below the clay.
  - When installing the deep wells, mud rotary shall not be used unless water is used for the drilling fluid. This is recommended because it is difficult to remove all the mud filter cake during development of the wells.
  - All wells drilled through the clay shall be double-cased. Driven Casing is preferable to augering 12 inch holes and setting casing.
  - Shallow wells installed shall have approximately 7 feet of screen if first water is encountered at about 4 to 5 feet. All shallow wells shall be screened across the water table.
- Note: (split spoon samples are not required for stratigraphic description from those shallow wells installed as a shallow/deep cluster.
- All well development water shall be contained in a secure container and analyzed for disposal.
14. Hexcel Corporation shall sample all monitoring wells including the on site supply well for: Volatile Organics + 15, Base Neutrals + 15, Acid Extractables + 10 , PCBs, Priority Pollutant Metals, Gross Alpha & Beta radiation, pH, and conductivity (if in the field).
  15. Hexcel Corporation shall submit in tabular form the following information for all monitoring wells:
    - Top of casing elevation
    - length of casing stick-up
    - depth of well
    - depth to ground water
    - elevation of water table
    - dissolved contaminant concentration
    - presence and thickness of product sheens
  16. Hexcel Corporation shall submit geologic logs and monitor well as-built diagrams, contaminant isopleth maps plus two ground water elevation contour maps based on data taken two weeks to a month apart. In addition, stratigraphic cross sections and a fence diagram shall be drafted based on the boring logs.
  17. Hexcel Corporation shall provide information on the production well and on the cooling system provided by the well. It shall include: total depth, diameter, length of casing, pump setting and well log.
  18. Hexcel Corporation shall field screen samples in the gasoline tank area (702) for benzene, toluene and xylene (BTX) in addition of PCE and Methylene chloride as proposed. A PID shall be made available for all field screening in case high methane levels interfere with OVA readings.

19. Hexcel Corporation shall field screen all Volatile Organic samples with an OVA as proposed to the top foot of the clay layer, beginning in the 0-2' surface increment. The contaminated zone shall be delineated and the final "clean" sample shall be submitted for lab analysis.

In all borings, the 6" interval across the clay layer shall be lab analyzed. If the clay layer is contaminated, vertical delineation shall continue to the "clean" zone using the sealing technique referenced on page 29 of the revised Sampling Plan (IV B) to prevent migration of contamination. Deep soil samples (14'-16', 19'-21') shall not be taken as proposed unless they are required for clean zone determination.

20. Hexcel Corporation shall conduct soil sampling at all proposed soil boring locations with the following modifications:

Area 1 - Boring 101 shall be moved west, directly adjacent to the building. An additional boring for vertical delineation shall be required for location A 11. Boring 106 shall be located adjacent to the industrial sewer.

Area 4 - Boring 401 shall not be required.

Area 5 - A boring shall be added to the area adjacent to the north end of the industrial sewer between areas 3 and 5. A boring shall be placed in any unpaved sections within diked area.

Area 6 - A boring shall be added just outside building 11 at the corner of the tank farm where no sampling is proposed.

Area 7 - One boring shall be required at a location approximately 20' southwest of 702, and a second location 20' northeast of 702. Boring 701 shall be moved to location D1. In figure 9.2 (plate 6) of the January 13, 1987 revised Sampling Plan submission, an outline of an underground storage tank appears just south of boring 702. This area shall be investigated, and if a tank does exist there it should be tested for integrity and information as to past and present contents provided.

Area 8 - A boring shall be added to the building side of the sewer pit.

Area 9 - Three (3) borings shall be added along the fence line adjacent to the leaking drum storage area reported in 1984. One boring shall be located at point F2. The other two shall be located approximately 25' lateral to and on each side of F2.

Area 10 - A boring shall be added and located in the oil stained broken pavement area off the southeast corner of the truck ramp.

Area 11 - Two (2) borings shall be added, evenly spaced along the dirt strip bordering the east side of the pavement area. The borings shall be within one foot of the pavement. Boring 1101 shall be moved directly adjacent to catch basin.

Area 13 - A boring shall be added adjacent to the building side of the manhole located midway along the west wall of the building #1.

21. Hexcel Corporation shall analyze for Petroleum Hydrocarbons (EPA method 418.1 with a soxhlet extraction per ECRA Sampling Plan Guide) for all areas of concern with samples collected in the 0-6" increment below pavement. Obviously contaminated areas (visual, odor) shall be delineated in the field with sampling at the clean zone. Hexcel Corporation shall also delineate to the 5 ppm action level where PCB contamination is identified. (Proposal to analyze only samples with PHC above 100 ppm for PCB's is not acceptable)
22. Hexcel Corporation shall provide the location of the transformer fire (noted on page II-8 of Appendix 8, Exhibit B) on a site map and shall sample for Petroleum Hydrocarbons and PCB in 0-6" increment.
23. Hexcel Corporation shall conduct Priority Pollutant + 40, and PHC analyses at the following boring locations: 201, 301, 502, 602, 801, 901, 1001, 1101, and the background location (MW-1). Sample depth for VO shall be as proposed in the Sampling Plan and modified above; sample depth for removing parameters shall be 0-6" beneath pavement.
24. Two samples of oily seep material in steam tunnel shall be analyzed for PCB's. When Sampling Plan results are submitted, Hexcel Corp. shall provide the location of all present and former fuel oil and hot oil system tanks with associated piping.
25. Borings 201, 301, 502, 602, 801, 901, 1001, 1101, and background (MW 1 area) shall be screened for elevated gamma activity using field survey equipment. Samples having levels elevated above background shall be submitted for lab analysis for thorium 228 and uranium 234.

VO method for soil shall be EPA Method 8240 or equivalent.

Priority Pollutants + 40 analyses shall use methods as referenced in the ECRA Sampling Plan Guide.

26. All PCB analyses shall include analyses for specific arochlors and total PCBs.
27. Samplers and sample containers shall be cleaned and prepared for field use according to the following procedures:
  1. Soap and tap water wash.
  2. Tap water rinse.
  3. 10% acidic solution rinse if sample is to be analyzed for metals.
  4. Distilled/deionized water rinse.
  5. Acetone rinse.
  6. Total air dry or nitrogen blow out.
  7. Distilled/deionized water rinse.
28. A PID shall be available for field screening if high methane levels interfere with OVA readings.
29. If available, disposal site of contaminated soils from holding pond beneath Building 11 shall be provided.
30. Rocky Mountain Analytical shall be utilized for lab analyses.
31. A Health and Safety Plan in accordance with all applicable OSHA regulations shall be implemented during all sampling activities.

32. Upon completion of future sampling the following information must be included with the sampling results.

- a. Provide in a tabular format the results of sampling. Include the sample number, location, interval and depth of sample, sample matrix, and the analytical methods used.
- b. A scaled site map of all well & soil boring location.
- c. A scaled site map which lists the concentrations of all significant contamination found (above ECRA action levels) at all sampling locations. The labelling of data should be keyed to facilitate interpretation especially at locations where more than one type of contaminant is found.

33. Please note that all sampling documentation and reporting must meet NJDEP Tier II standards.

34. Data Results and Presentation

- a. The consultant must respond to this letter point by point in the order of the conditions outlined above.
- b. Because of case complexity and the volumes of data to be reviewed and processed, the above noted formatting requirements are essential to insure complete and timely review of the submittal.
- c. Tier II deliverables must be identified and separated from the submittals, discussion, conclusions and data summary sheets.
- d. Failure to organize submittal information as outlined above can constitute reason to return the submittal to the consultant for correction and resubmission, thus causing further delay in case processing.

35. The Cleanup Plan Proposal

The following elements constitute an approvable Cleanup Plan and should be used as a guide and checklist in developing the Clean Plan:

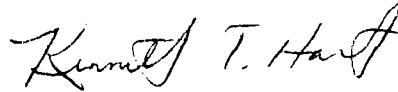
- a. Introduction.
- b. Summary of Environmental Concerns. Include the results of previous sampling.
- c. The proposed remedial actions. Include the evaluation of any alternative remedial actions if appropriate.
- d. Cleanup levels to be achieved. Be specific with regard to media and parameters.
- e. A Work Plan must detail the specific activities that will be used to complete the proposed cleanup objectives.
- f. A post remediation sampling and monitoring plan.
- g. A specific time table for implementation of the Cleanup Plan which includes milestones in the project.

on a month basis.

1. Estimate costs for cleanup.

This document was prepared by the Case Manager, Michael Nalbone. If you have any questions, please contact the Case Manager at (609) 633-7141.

Very truly yours,



*for* Joseph R. Fallon, Chief  
Bureau of Environmental Evaluation  
and Cleanup Responsibility Assessment

E27:dg

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